

# KILL THESE ALIEN INVADERS in your YARD, PARKS and WOODLOTS!

# WHAT ARE INVASIVE BUSH HONEYSUCKLES?

Not to be confused with Missouri's native vine honeysuckles, invasive bush honeysuckles such as Morrow's and Amur are shrubby natives of Asia. Here in the United States, where they have no natural controls, they leaf out in April, grow fast, spread fast and form dense thickets that crowd out Missouri's native forest plants. If you've got a giant green thicket in your woods, you may have a bush honeysuckle infestation.



Bush honeysuckle blossoms are white to yellow, fragrant and bloom in April and May. The leaves are narrower and more pointed than native honeysuckle's, and they are attached by short, slender petioles to the main stem.



Bush honeysuckle's abundant flowers yield loads of berries in the fall—which birds eat and drop, further infesting the local area.



Bush honeysuckle thickets like this one are taking over Missouri's woodlands. Notice that it greens up before native shrubs and trees. This early green-up shades out everything growing underneath it.



# HOW TO TELL THE GOOD FROM THE BAD

Missouri's beneficial native honeysuckle is a vine, and its roundish leaves are closely attached to the stem. The blossoms are yellow to red and trumpet-shaped and appear late April and early May.

# HOW CAN I KILL THEM?

The longer bush honeysuckles grow and spread, the more expensive they are to manage and control. The best time to start killing bush honeysuckle is TODAY! Success will come over time if you get to know the plant, acquaint yourself with the range of control techniques and keep at it.

# MECHANICAL CONTROL

## Pull small ones in the spring.

Bush honeysuckle invasions are easier to thwart if you kill the plants before they start producing fruit, which they do at three to five years of age. Young plants are easiest to pull in the spring, when they are young and small, and soils are moist. Their early emerging green leaves make them easy to spot. Even larger bush honeysuckles may be easier to pull at this time of year because their root systems are shallow and not interconnected.

# CHEMICAL CONTROL

### Cut and spray big ones in the summer.

In summer, a combination of cutting and herbicide is most effective. Cut large stems with brush cutters, chainsaws or hand tools, and treat cut stems with herbicide immediately. Cutting will encourage intense re-sprouting if not followed by herbicide treatment before the cut

stem surface dries. The management standard is 20% glyphosate (Roundup™ or Rodeo™), either sprayed or applied to cut stems with

> brushes. Glyphosate is a non-selective herbicide and should be applied carefully to prevent accidental

application to desirable vegetation. Please follow all label recommendations for mixing rates, application and safety precautions when using chemicals or herbicides.

Application should occur in late summer, early fall or the dormant season. Spring applications are less effective on stumps because resources are flowing to new buds instead of the roots. Winter treatment has shown to be more effective than spring treatment. Reapplication of herbicide and re-cutting may be necessary to stop re-sprouting.

# LONG-TERM MANAGEMENT AND CONTROL

The key to reducing landscape-level invasions is to catch newly colonized areas before they start producing seeds. Shrubs in open ground or edges are more productive than interior forest populations, and they should be targeted first for eradication or prevented from seeding.

E BUSH HONEYSUCKLES dig young plants.

Cut and spray big plants.

Recut and reapply herbicide.

Cut and spray big plants.



Missouri Department of Conservation Missouri Department of Agriculture www.grownative.org

It's easy to find and use Missouri's native shrubs.

If you're new to native plant gardening, you're not alone. Grow Native!, a joint program of the Missouri Departments of Conservation and Agriculture, is here to help you discover, choose and use native plants on your landscape wherever you live. Begin by exploring our Web site at www.grownative.org. Use the "Plant Search" to find species that will work for your specific conditions and goals. If your local nursery doesn't sell native plants, use the site's "Buyer's Guide" to find sources that do. You also can find landscape designs, as well as skilled contractors.

Grow Native! takes the guesswork out of succeeding with native plants.

# WHAT SHOULD I PLANT IN PLACE OF BUSH HONEYSUCKLES?

Choose native species that work for you and for wildlife. The shrubs listed here give your landscape beauty, co-exist peacefully with other native plant species and provide food and cover for butterflies, birds and wildlife. Shop for them via www.grownative.org, click on "Buyer's Guide."



American beautyberry (Callicarpa americana) Deep pink blossoms yield bright purple berries that persist far into the winter, feeding birds and small mammals.



American hazelnut (Corylus americana) This attractively shaped, many-stemmed shrub with redorange fall foliage and tasty nuts feeds quail, grouse, blue jays, squirrel and deer.



Buttonbush (Celphalanthus occidentalis) Hundreds of ball-shaped, creamy white flowers form in August. This shrub provides food and cover for butterflies, songbirds and beneficial insects.



Carolina buckthorn (Rhamnus caroliniana) Attractive to bees, butterflies and birds, this species can be grown as a small tree or large shrub. The leaves are a shiny, dark green with a pale underside. The bright red fruits stay on until October.



**Deciduous holly** (*llex opaca*) A real eye-popper, this small tree's striking red-orange berries brighten your winter landscape and feed birds, deer and small mammals until spring.



Elderberry (Sambucus canadensis) Large, flat showy clusters of white, fragrant flowers in spring give way to clusters of dark purple-to-black, berrylike fruits in late summer and fall. Birds and mammals eat the berries—unless you use them to make jelly, pie and wine.



Flowering dogwood (Cornus florida) This small tree with spreading horizontal branches puts on distinctive white flowers in mid-April and yields clusters of glossy red fruit in fall. Leaves give you deep red fall color; red berries feed the birds and small wildlife.



Fragrant sumac (Rhus aromatica) This low-spreading shrub bears yellow-green flowers before leaves emerge. Clusters of fuzzy red fruit form on female plants in August and may persist into winter. Birds and mammals feed on the fruit. Leaves turn bright red-purple in fall.



Golden currant (Ribes odoratum) In spring, golden yellow flowers appear and emit a strong, clove-like fragrance. Birds and small animals eat the round, black berries formed June through August.



Blackhaw (Viburnum prunifolium) This multistemmed shrub produces flat heads of white flowers in the spring. Birds eat the purple-black fruit in the fall. The leaves develop a beautiful red color in fall. Two plants are required for cross pollination and fruit set.



New Jersey tea (Ceanothus americanus) Great butterfly nectar plant for hot, dry sites. Billows of delicate white flowers in spring yield clusters of small black fruit in July and August.



Ninebark (Physocarpus opulifolius) This handsome shrub produces clusters of white to pinkish flowers in May and June. Fruit in reddish drooping clusters feed birds in the fall. In winter, the bark on mature stems peels away in strips to reveal reddish-to-light-brown layers.



Pagoda dogwood (Cornus alternifolia) Spreading, low-branched tree with great horizontal habit and blue-black berries on red stems—a good alternative to cold-sensitive flowering dogwood in northern areas.



Red buckeye (Aesculus pavia) Spikes of showy red flowers attract and feed ruby-throated hummingbirds in spring. Foliage drops naturally in late summer and brown, egg-shaped fruit appear in the fall.



Rusty blackhaw (Viburnum rufidulum) Showy flat clusters of white flowers adorn the plant April-May. Drooping clusters of blue-black fruit with red stems form in September. Many types of birds and mammals eat the fruit. Leaves turn rich burgundy in fall.



Sassafras (Sassafras albidum) This medium-sized tree produces clusters of small yellow flowers in early spring and fragrant, mitten-shaped leaves that turn deep orange to scarlet and purple in the fall. It's a host plant for many moths and butterflies.



Serviceberry (Amelanchier arborea) Fragrant white flowers in April give rise to very flavorful, purpleblack, berrylike fruits relished by both songbirds and people. This lovely tree has colorful fall foliage in a blend of orange, gold, red and green.



Spice bush (Lindera benzoin) A broad, rounded multistemmed shrub covered with fragrant yellow-green flowers in early spring. Aromatic leaves turn deep yellowgold in fall. Birds feed on the small red berries.



Wild plum (Prunus americana) The pure white, overwhelmingly fragrant flowers are among the first to open in spring. Birds and wildlife love the small, round, edible plums in late summer and fall.



Vernal witch hazel (Hamamelis vernalis) This unique shrub flowers from late winter into early spring, when little else is blooming. The fragrant flowers are yellow to dark red, and have four short, strap-like petals. Turkey and ruffed grouse eat the seeds and flowers.

# WHERE DO I GO FOR MORE INFORMATION?

Once people learn that invasive bush honeysuckles threaten Missouri's native plants and animals, they become passionate about getting rid of them. Here are some sites to help you learn more and do more to kill bush honeysuckles—and keep them from taking over your woods.

#### Missouri Department of Conservation

www.mdc.mo.gov/nathis/exotic/

More in-depth discussion about how to control bush honeysuckles and other invasive plants, including methods that DON'T work.

#### Conservation Contractor

www.mdc.mo.gov/programs/contractor/
Don't want to do the job yourself? Use this site to find an experienced "habitat helper."

#### Missouri Botanical Garden

www.mobot.org/invaders

Check out "Invaders of the Gateway Region,"
Missouri Botanical Garden's innovative campaign
to empower volunteer "citizen scientists" to more
effectively slow the spread of harmful invasive species.

#### Midwest Invasive Plant Network

www.MIPN.org

More help reducing the impact of invasive species in the Midwest

#### Missouri Department of Agriculture

www.mda.mo.gov

Get acquainted with Missouri's most unwanted plants and animals.

#### Mister Honeysuckle

www.misterhoneysuckle.com Humorous, helpful site sells tool claiming to "pop" bush honeysuckles out of the ground

## **United States Department of Agriculture**

www.plants.usda.gov

Federal site helps citizens and businesses improve their natural resource management

#### The Center for Plant Conservation

www.centerforplantconservation.org
Site dedicated to recovering America's "vanishing flora"

#### **Grow Native!**

www.grownative.org

Co-sponsored by the Missouri Departments of Conservation and Agriculture, this site helps you find and use native alternatives to invasive plants.





Equal opportunity to participate in and benefit from programs of the Missouri Department of Conservation is available to all individuals without regard to their race, color, nationality, sex, age or disability. Questions should be directed to the Department of Conservation, P.O. Box 180, Jefferson City, MO 65102, (573) 751-4115 (voice) or I-800-735-2966 (TTY), or to the U.S. Fish and Wildlife Service Division of Federal Assistance, 4401 N. Fairfax Drive, Mail Stop: MBSP-4020, Arlington, VA 22203.